

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 61-185182

(43)Date of publication of application : 18.08.1986

(51)Int.Cl.

C12N 1/20  
// A23C 9/12  
(C12N 1/20  
C12R 1:01 )

(21)Application number : 60-025215

(71)Applicant : MEIJI MILK PROD CO LTD

(22)Date of filing : 14.02.1985

(72)Inventor : MURAO TADAHISA  
KANEKO TSUTOMU  
TAKAHASHI TSUYOSHI

## (54) MUTANT STRAIN OF BIFIDUS AND CULTIVATION COMPOSITION THEREOF

(57)Abstract:

PURPOSE: To provide the titled mutant belonging to *Bifidobacterium longum*, having high hydrogen peroxide resistance, and capable of keeping the number of bifidus cells even in the storage of a food under aerobic condition or acidic condition.

CONSTITUTION: *Bifidobacterium longum* ATCC-15708 is applied to a blood liver agar (BL agar) plate or Brigg's liver agar plate, irradiated with ultraviolet radiation to an extent to give a survival rate of  $\leq 0.1\%$ , and cultured at 37°C for 48hr under anaerobic condition. The strain is streaked to a BL agar plate, cultured under anaerobic condition, subjected to pure culture, and sub-cultured for several generations. A strain resistant to H<sub>2</sub>O<sub>2</sub> having high concentration as far as possible is selected by the H<sub>2</sub>O<sub>2</sub> resistant test. A number of H<sub>2</sub>O<sub>2</sub> resistant strains were sub-cultured for 10 generations, and a strain [*Bifidobacterium longum* No.1022 (FERM-P No.8033)] having H<sub>2</sub>O<sub>2</sub> resistance and high stability was separated. The strain has improved oxygen resistance and acid resistance.

